

Amendment to the Claims

1.-23. (Cancelled)

24. (Previously presented) An electrostatic discharge system for a road vehicle comprising:
at least one electrically conducting conductor element in electrical contact with an
electrically conducting part of the vehicle body;

actuation means mountable to said vehicle, said actuation means adapted for selectively
and reversibly moving said conductor element between a deployed position and a retracted
position, wherein in said deployed position said conductor element is in contact with the ground
such as to provide an electrical pathway for electric charge from said electrically conducting part
of the vehicle body to the ground, and wherein in said retracted position said conductor element
is distanced from the ground such as to interrupt said electrical pathway; and

control means operatively connected to said actuation means and to a user interface,
adapted for controlling operation of said actuation means responsive to an interaction with said
user interface,

wherein said actuation means are powered by suitable power means including an
electrical motor.

25. (Previously presented) A system as claimed in claim 24, wherein said power means
comprises an electrical stepper motor.

26. (Original) A system as claimed in claim 24, wherein said motor comprises a shaft
connected to said conductor element and wherein said shaft is capable of selectively and
reversibly rotating the shaft through a predetermined arc α , from said retracted position said
deployed position, and back to the retracted position.

27. (Original) A system as claimed in claim 24, wherein said motor is connected to a suitable electrical power source and said user interface via a suitable circuit.

28. (Original) A system as claimed in claim 27, wherein said interface comprises the brake light circuit of said vehicle.

29. (Original) A system as claimed in claim 28, wherein selective completion or braking of said brake light circuit, responsive to an interaction by user comprising actuation or release of the brake, reversibly deploys or retracts said conductor element.

30. (Original) A system as claimed in claim 27, wherein said interface comprises the parking light circuit of said vehicle.

31. (Original) A system as claimed in claim 30, wherein selective completion or braking of said parking light circuit, responsive to an interaction by user comprising actuation or release of the parking mode of the gearbox of the vehicle, reversibly deploys or retracts said conductor element.

32. (Original) A system as claimed in claim 27, wherein said interface comprises a suitable switch actuable by a user in the vehicle.

33. (Original) A system as claimed in claim 32, wherein selective completion or braking of a switch light circuit of said switch, responsive to an interaction by user comprising actuation or inactivation of said switch, reversibly deploys or retracts said conductor element.

34. (Currently amended) A system as claimed in claim 23 24, wherein said actuating means comprises a suitable housing mountable to an underside of said vehicle.

35. (Currently amended) A system as claimed in claim 23 24, further comprising an electrical conductor fixed to said electrically conducting part of said vehicle and to said conductor element.

36. (Original) A system as claimed in claim 26, wherein said conductor element comprises an upper part pivotably mounted to said shaft and a lower part comprising a free end.

37. (Original) A system as claimed in claim 36, wherein said lower part is telescopically slidable with respect to said upper part for adjusting a longitudinal length of said conductor element.

38. (Original) A system as claimed in claim 36, wherein said free end is in spherical form.

39. (Original) A system as claimed in claim 36, wherein said lower part is in substantially rectilinear form.

40. (Original) A system as claimed in claim 36, wherein said lower part is in substantially helical form.

41. (Previously Presented) An electrostatic discharge system for a road vehicle comprising:
at least one electrically conducting conductor element in electrical contact with an electrically conducting part of the vehicle body;
actuation means mountable to said vehicle, said actuation means adapted for selectively and reversibly moving said conductor element between a deployed position and a retracted

position, wherein in said deployed position said conductor element is in contact with the ground such as to provide an electrical pathway for electric charge from said electrically conducting part of the vehicle body to the ground, and wherein in said retracted position said conductor element is distanced from the ground such as to interrupt said electrical pathway; and

control means operatively connected to said actuation means and to a user interface, adapted for controlling operation of said actuation means responsive to an interaction with said user interface,

wherein said user interface comprises a suitable computer programmed to provide suitable deployment and retracting signals to said control means according to predetermined conditions, and

wherein said control means comprise suitable power means for powering a driving means according to signals received from said computer.

42. (Original) A system as claimed in claim 41 further comprising a motion sensor operatively connected to said computer, and wherein said computer is programmed to provide appropriate deployment signal to said actuation means when said motion sensors sense an absence of motion by the vehicle.

43. (Cancelled)

44. (Previously presented) A method for discharging static electricity from a vehicle comprising:

(a) providing a selectively retractable and deployable electrical conductor in electrical contact with the vehicle body;

(b) when it is desired to provide a ground path for the vehicle, deploying the conductor such as to contact the ground;

(c) when it is desired to stop such contact, retracting the conductor,

Applicant: D. Elon
Application No. 10/725,964
Examiner: L. Thomas

wherein the step of providing a ground path for the vehicle is advantageously associated with operation of the handbrake system of the vehicle.